

CLAIMS

What Is Claimed Is:

1. A wafer cassette pod equipped with a position sensing device comprising:

a cassette pod body formed of a top panel, a bottom panel, a front panel and two side panels;

a rear opening in said cassette pod body formed by said top panel, said bottom panel and said two side panels for receiving wafers therethrough, said two side panels further comprises recessed slots on inside surfaces for positioning said wafers; and

at least two spring-loaded position sensing devices each mounted in one of said two side panels with a finger protruding beyond an end surface of said side panel to push said cassette pod body away from a loadport of a process machine when said cassette pod body is not properly positioned on said loadport.

2. A wafer cassette pod equipped with a position sensing device according to claim 1, wherein said at least two spring-loaded position sensing devices are four position sensing devices with two mounted in each side panel.

3. A wafer cassette pod equipped with a position sensing device according to claim 1, wherein said at least two spring-loaded position sensing devices each comprises:

a case having a opening in a front side;
a finger protruding through said opening of the case; and
at least one spring pushing said finger outwardly away from said case.

4. A wafer cassette pod equipped with a position sensing device according to claim 1, wherein said two spring-loaded position sensing devices are mounted in a side panel with one near the top and the other near the bottom.

5. A wafer cassette pod equipped with a position sensing device according to claim 1, wherein each of said at least two spring-loaded position sensing devices is further equipped with a connecting node mounted on said finger for making electrical connection with a sensor and for sending out a signal to a process controller when said connection is not made.

6. A wafer cassette pod equipped with a position sensing device according to claim 1, wherein said two side panels further comprises slot openings in said end surface for mounting said at least two spring-loaded position sensing devices.

7. A wafer cassette pod equipped with a position sensing device according to claim 1, wherein said two side panels further comprises slot openings in said end surface for frictionally engaging said at least two spring-loaded position sensing devices.

8. A wafer cassette pod equipped with a position sensing device according to claim 1, wherein said at least two spring-loaded position sensing devices each equipped with a spring that has a spring constant sufficiently large to push a fully loaded wafer cassette pod away from an opening of said loadport.

9. A wafer cassette pod equipped with a position sensing device according to claim 1, wherein said finger on said position sensing device is loaded by two springs.

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10. A wafer cassette pod equipped with a position sensing device according to claim 1, wherein said finger on said position sensing device is loaded by three springs.